

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 917 to 960

M. S. F. L.
Record Book
1881.

No. 1.

Observations 917-

July 16th to

Copy.

TEMPERATURE RECORD.

Instrument used, ~~917~~ Trawl
 Current number of observation, 917
 Date, July 16.
 Locality, Off Martha's Vineyard
 Bearings, Lat. $40^{\circ}22' N$.
 Long. $70^{\circ}42' W$.
 Time of day, 4.10 a.m.; of tide,
 State of sky, Clear
 Temperature of air, 66°
 " surface of water, 63° (n. g. $(46^{\circ}40'2)$)
 20 f. 45° " at depth of 10 fathoms, 49°
 " of bottom, 42° (n. g. $(46^{\circ}40'3)$)
 Depth, in fathoms, $43 = 44$
 Nature of bottom, Green mud
 Direction of ~~surface~~ ^{wind} current, S. E. Force, 1.
 Drift, N. E. $3\frac{1}{4}$ miles.
 Force of surface current,
 Direction of bottom current,
 Force of bottom current,
 Name of vessel, Fish Hawk.
 To what service attached, U. S. F. C.
 Name and rank of commanding officer, Z. L. Tanner
 Lieut., U. S. N.
 Name and position of observer,
 Prof. A. P. Chapin
 Yeoman.

917

REMARKS.

Pandalus Montagu ? few
Asterias vulgaris. half a dozen
Pecten tenuicostatus abundant & small
Ophioglypha Sardii 1-2 in diam
Unatia ?eros. Shell.
 Egg Cases abd.
Crangon vulgaris. 2.
Cyprina Islandica small.
Goldia sapidilla com.
Pleurobranchia Larva.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

918.

Date,

July 16, 1881.

Locality,

Off Martha's Vineyard.

Bearings,

Lat. $40^{\circ} 20' 24''$ N.

Long. $70^{\circ} 41' 30''$ W.

Time of day, 5, 33 am; of tide,

State of sky,

Clear

Temperature of air,

67°

"

surface of water,

63

(46402)

20 f. 45°

at depth of

10

fathoms,

49°

"

of bottom,

42°

(46403)

Depth, in fathoms,

45 f. = 46.

Nature of bottom,

green mud.

Direction of surface current,

wind. S.E. force 1.

Force of surface current,

drift N.N.E. 1 m

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

918

REMARKS.

- ^{leptocerus}
Pandalus Montagu ? very abdt.
Ophiog. *lancei*. "
As. *vulgaris*. several
Guidia elegans . 1.
Amphiuva Squamata?
~~*Pteroteuthis tenera*?~~
~~*Rossia rubra*~~
Pleurobranchia lardii.
Lunatia heros.
Goldia Sapotilla.
Cardium pinnulatum
Cyprina Islandicus. very yg.
Anomia aculeata.
Pecten tenuicostatus. ^{young} very abdt.
Lucina filosa dead.
~~*Sapetom*~~
Saematonice armata.
Eupagurus. in *Neptunus pygmaea*
Nephtys incisa.
Scaphander punctostriata
Caprella
Aphrodite aculeata.
Thracia Conradi dead.
Cancer borealis young?
Acyonidium rubrum
Caralina tridentata

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *919*

Date, *July 16, 1881.*

Locality, *off Martha's Vineyard*

Bearings, *Lat. 46° 16' 18" N*

Long. 70° 41' 18" W.

Time of day, *7 am.*; of tide, *—*

State of sky, *Clear*

Temperature of air, *70°*

" surface of water, *66° (46402)*

" at depth of *15* fathoms, *48°*

" of bottom, *42 1/2 (46403)*

Depth, in fathoms, *57 1/2 = 53.*

Nature of bottom, *green mud*

Direction of ~~surface~~ *wind* current, *S. force 1.*

Force of surface current, *Drift N. E. 1 m*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

66.

Name and position of observer,

*42
24*

919

REMARKS.

Beckon Limnicostelus very abundant
mostly small 1-2 inch

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *920.*
Date, *July 16, 1881.*
Locality, *Off Martha's Vineyard*
Bearings, *Lat 40° 13' N,*
Long. 70° 41' 54" W,
Time of day, *8.20 am* of tide,
State of sky, *Clear*
Temperature of air, *72*
" surface of water, *66 46402*
" at depth of *10* fathoms, *48°*
" of bottom, *49° 46403*
Depth, in fathoms, *61, = 63.*
Nature of bottom, *green mud*
Direction of ~~surface~~ *wind* current, *S. force 1.*
drift
Force of surface current, *W. by S. 1 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

- Archaster Americanus* very abdt.
Actinia vulgaris. few
Epizoanthus Americanus common
Articina perdis. Dozen or more
Camphura new sp. very abdt.
Pleurobranchia luida many.
Hebertotenthus tenera. 8.
Pecten tenuicostatus large many.
Anomia aculeata com.
Cyprina Islandica
Lunatia Texas.
Neptunea arata dead
Gouldia Sapotilla.
Loripes lensen dead
Suberites sp.
Ophiophorus varii.
Ophiopholis aculeata.
Euprognathus. sp. small.
Pontoporpholis Norvegicus.
Randallia. sp.
Molgula.
Ampelisca gracilis.
Hemipagurus small sp.

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *921.*
 Date, *July 16, 1884.*
 Locality, *off Martha's vineyard.*
 Bearings, Lat. *40° 07' 48" N*
Long. 70° 43' 54" W.
 Time of day, *9.40 a.m.* of tide,
 State of sky, *Clear.*
 Temperature of air, *75°*
 " surface of water, *70.* (*46402*)
 " at depth of *10* fathoms, *66°.*
 " of bottom, *52°* (*42663*)
 Depth, in fathoms, *65 = 67.*
 Nature of bottom, *green mud*
 Direction of surface current, *wind S. S. W, force 1.*
light
 Force of surface current, *W, 1 mi*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *922*,
 Date, *July 16, 1884*,
 Locality, *Off Martha's Vineyard*,
 Bearings, *Lat. 40° 03' 48" N*
Long. 70° 45' 54" W.
 Time of day, *10.57 a.m.* of tide,
 State of sky, *Clear*
 Temperature of air, *76°*
 " surface of water, *72*
 " at depth of *10* fathoms, *59°*
 " of bottom, *520*,
 Depth, in fathoms, *69 = 71*.
 Nature of bottom, *green mud, sand*
 Direction of surface current, *S.W. force 2*
 Force of surface current, *Drift N. by W. 1 m*
 Direction of bottom current.
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *923.*
Date, *July 16, 1884.*
Locality, *off Martha's Vineyard*
Bearings, *Lat. 40° 01' 24" N*
Long. 70° 46' W.
Time of day, *12.27 P.M.* of tide.
State of sky, *Clear*
Temperature of air, *74 1/2°*
" surface of water, *72°*
" at depth of *10* fathoms, *55°*
" of bottom, *52°*
Depth, in fathoms, *96. = 98.*
Nature of bottom, *sand*
Direction of ~~surface~~ *wind* current, *S.W., force 2.*
Drift
Force of surface current, *W.N.W., 1 1/2 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *924*,
 Date, *July 16, 1884*,
 Locality, *Off Martha's Vineyard*,
 Bearings, *Lat. 39° 57' 30" N.*
Long. 70° 46' W.
 Time of day, *1152 P.M.*, of tide,
 State of sky, *Clear*,
 Temperature of air, *74 1/2*
 " surface of water, *71*
 " at depth of *5* fathoms, *70° 10' 61°*
 " of bottom, *44 1/2*,
 Depth, in fathoms, *160 = 164*,
 Nature of bottom, *Sand*
 Direction of ~~surface~~ *wind* current, *S.W. force 2*
 Force of surface current, *Drift - N.W. 2 m*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *925*
 Date, *July 16, 1881*
 Locality, *Off Marquesas Island*
 Bearings, *Lat. 39° 55' N*
Long. 70° 47' W
 Time of day, *3.35 PM*; of tide,
 State of sky, *Hazy*
 Temperature of air, *74*
 " surface of water, *71*
 " at depth of *5* fathoms, *70* / *10 f. 58*
 " of bottom, *42*
 Depth, in fathoms, *224, = 229*
 Nature of bottom, *Sand and mud*
 Direction of ~~surface current~~ *current* *S. S. W. force 3.*
 Force of surface current, *Drift N. W. by W. 1 1/2 m*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *926*
Date, *July 16, 1884*
Locality, *off Martha's vineyard*
Bearings, *Lat. 39° 56' N*
Long. 70° 46' W.
Time of day, *5.24 P.M.*, of tide,
State of sky, *Cloudy*
Temperature of air, *74°*
" surface of water, *71°*
" at depth of *10* fathoms, *68°*
" of bottom, *44°*
Depth, in fathoms, *195. = 199.*
Nature of bottom, *mud and sand*
Direction of ~~surface~~ *wind* *S. S. W.*, force *3*,
drift *N. W. 1/2 N.*, *2 1/2 m*
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *927*
 Date, *July 20*
 Locality, *Mississippi Bay*
 Bearings, *Gay Head Lighthouse N. by E. 1/2 S. Dist. 2 1/2 m.*
Sebastian Cove Lighthouse N. W. & Dist. 6 m.
 Time of day, *10.47* ; of tide, *Ebb.*
 State of sky, *Cloudy*
 Temperature of air, *68*
 " surface of water, *62*
 " at depth of *5* fathoms, *61*
 " of bottom, *59*
 Depth, in fathoms, *11*
 Nature of bottom, *Sandy*
 Direction of ~~surface current~~ *Wind* *S. S. W.* Force *2*
 Direction of ~~bottom current~~ *Drift* *W. N. W. 1/2 m.*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

928

Date,

July 20

Locality,

Murrenaka Bight

Bearings,

by head light N. 32° E. 2 1/2 m.

by starboard light N. 22° E. 8 1/2 m.

Time of day,

11.30

of tide,

low water

State of sky,

Partly cloudy

Temperature of air,

69

"

surface of water,

62 1/2

"

at depth of

5

fathoms,

59

"

of bottom,

60

Depth, in fathoms,

10

Nature of bottom,

Sand

Direction of

Wind

S.S.W.

Force 3

Force of surface current,

Drift

1/2 by R 1/2 m.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Dredge

Current number of observation,

929

Date,

July 20

Locality,

Unzueta Is. off Guicks Hole

Bearings,

Gay Head S. by W. $4\frac{1}{4}$ m.

Nobeska Is.

N. 2 by E. $\frac{3}{4}$ E 10 m.

Time of day,

12:35 P.M.

of tide, Low water

State of sky,

cloudy

Temperature of air,

66

"

surface of water,

63

"

at depth of

5

fathoms,

"

of bottom,

62

Depth, in fathoms,

10

Nature of bottom,

Sand

Direction of ~~surface~~ current,

Wind

S. S. W.

Force 3

~~Force~~ surface current,

Drift

S. E. by S

$\frac{3}{4}$ m.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Dredge

Current number of observation,

930

Date,

July 20

Locality,

Vineyard Id. off Quicks Hole

Bearings,

by Head S. by W. $4\frac{1}{2}$ m.

Vineyard Id. S. by W. $7\frac{1}{2}$ m.

Time of day,

1.10 P.M. ; of tide,

Low water

State of sky,

cloudy

Temperature of air,

65

"

surface of water,

63

"

at depth of

5

fathoms,

63

"

of bottom,

62

Depth, in fathoms,

12

Nature of bottom,

Sand and shells

Direction of

Wind

S. W. Force 2

Force of surface current,

Drift

S. $\frac{1}{2}$ E. $\frac{1}{2}$ m.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Dredge

Current number of observation,

931

Date,

July 20

Locality,

Vineyard Id. off Robinson Mass.

Bearings

Robeca Lgh. S. by E. 2 M.

Gay Head Lgh. S. W. $\frac{1}{2}$ S. $\frac{1}{2}$ E. 5 $\frac{1}{2}$ M.

Time of day, *1.42 P.M.* : of tide,

flood.

State of sky,

Cloudy

Temperature of air,

63

"

surface of water,

63

"

at depth of

5

fathoms,

"

of bottom,

62

Depth, in fathoms,

16

Nature of bottom,

Sand and shells

Direction of surface current,

Wind

S. W.

Force 2

Force of surface current,

Drift

S. $\frac{1}{2}$ W.

$\frac{1}{2}$ M.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

932

Date,

July 20

Locality,

Vineyard Lk. off Longport Bay.

Bearings,

San Juan Lk. 2 Sph. N. by E 2 1/2 m.

Robaka Lk. N. by E 3 1/2 m.

Time of day,

2.43 P.M.

of tide, flood

State of sky,

Cloudy

Temperature of air,

67

"

surface of water,

66

"

at depth of

5

fathoms,

66

"

of bottom,

66

Depth, in fathoms,

14

Nature of bottom,

Rock

Direction of surface current,

S.W.

Force 2

Direction of surface current,

Drift N.W. by N. 1/4 m.

Direction of bottom current,

Intermediate time 10 fath. 65

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Dredge

Current number of observation,

933

Date,

July 20

Locality,

Long and lat. off Vineyard Haven

Bearings,

West Chop Light S $3\frac{1}{4}$ E. $\frac{3}{4}$ m.

Long Point Cove Light W. 7 m.

Time of day,

3.30 P.M. of tide.

flood

State of sky,

Cloudy

Temperature of air,

68

"

surface of water,

65

"

at depth of

5

fathoms,

64

"

of bottom,

64

Depth, in fathoms,

14

Nature of bottom,

Stones

Direction of ~~surface current~~, *Wind*

S.W.

Force 8.

8.

Force of ~~surface current~~, *Drift*

S.W. 2 1/2

2 1/2

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

934

Date,

July 20

Locality,

off Portsmouth harbor

Bearings,

Robeca Lgh N. $\frac{3}{4}$ E $1\frac{3}{4}$ m

West Chop Lgh S $\frac{3}{4}$ E $2\frac{3}{4}$ m

Time of day,

4:10 P.M. of tide.

flood.

State of sky,

Cloudy

Temperature of air,

68

" surface of water,

67

" at depth of

5

fathoms,

67

" of bottom,

67

Depth, in fathoms,

9

Nature of bottom,

Sand and gravel.

Direction of surface current,

Wind S.W.

Force 2

Force of surface current,

Drift

N.N.W.

1 m.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, _____

Current number of observation, _____

Date, _____

Locality, _____

Bearings, _____

Time of day, _____ of tide, _____

State of sky, _____

Temperature of air, _____

" surface of water, _____

" at depth of _____ fathoms, _____

" of bottom, _____

Depth, in fathoms, _____ = 782

Nature of bottom, _____

Direction of surface current, _____

Force of surface current, _____

Direction of bottom current, _____

Force of bottom current, _____

Name of vessel, _____

To what service attached, _____

Name and rank of commanding officer, _____

Name and position of observer, _____

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms,

= 716.

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, ...
Current number of observation, ...
Date, ...
Locality, ...
Bearings, ...
Time of day, ... of tide,
State of sky, ...
Temperature of air, ...
" surface of water, ...
" at depth of ... fathoms,
" of bottom, ...
Depth, in fathoms, ... = 516, { should be }
Nature of bottom, ...
Direction of surface current, ...
Force of surface current, ...
Direction of bottom current, ...
Force of bottom current, ...
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, 2 1/2 ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, of tide,

State of sky,

Temperature of air,

" surface of water.

" at depth of fathoms,

" of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Thermometer*

Current number of observation, *1000*

Date, *Aug 28 1880*

Locality, *off Cape Cod*

Bearings, *200*

Time of day, *11:40*; of tide, *ebb*

State of sky, *b, c, s*

Temperature of air, *70*

" surface of water, *68*

" at depth of *10* fathoms, *65*

" of bottom, *gy. m.*

Depth, in fathoms, *130 = 134*

Nature of bottom, *gy. m.*

Direction of surface current, *drift*

Force of surface current, *1.5 mi.*

Direction of bottom current, *drift*

Force of bottom current, *1.5 mi.*

Name of vessel, *U.S.F.C. Albatross*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *Comdr. J. D. Sigsbee*

Name and position of observer, *Asst. Surg. J. W. Foster*

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Reuss*

Current number of observation, *74*

Date, *Aug 11*

Locality, *off Cape Cod*

Bearings, *S. 20° W. 10*

Time of day, *7:45 AM*; of tide,

State of sky, *Clear*

Temperature of air, *74*

" surface of water, *71*

" at depth of *5* fathoms,

" of bottom, *fine*

Depth, in fathoms, *72 = 79.*

Nature of bottom, *fine sand*

Direction of surface current, *W. 1/2 N.*

Force of surface current, *1 1/2*

Direction of bottom current, *drift*

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Dredge

Current number of observation,

942

Date,

Aug. 9th

Locality,

Lat 40° 01' N

Bearings,

Long 71° 12' 36" W

Time of day,

6.15 AM; of tide,

State of sky,

clear

Temperature of air,

72

" surface of water,

69

" at depth of

5

fathoms,

69°, 10 faths 65°

" of bottom,

50°

Depth, in fathoms,

134 = 138.

Nature of bottom,

Sand and mud.

Direction of surface current,

Wind

S. W. Force 2

Force of surface current,

Drift

S. W. 1/2 W. 2 m.

Direction of bottom current,

Temperature at

20 f. 52°

Force of bottom current,

50 f. 53°

Name of vessel,

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Dredge*

Current number of observation, *943*

Date, *Aug. 9th*

Locality, *Lat. 40. N.*

Bearings, *Long. 71° 14' 30" W.*

Time of day, *7:10 A.M.*; of tide,

State of sky, *Clear*

Temperature of air, *76*

" surface of water, *70*

" at depth of *5* fathoms, *69° 15' 65"*

" of bottom, *49*

Depth, in fathoms, *153 = 157.*

Nature of bottom, *Mud, sand & shells*

Direction of surface current, *Wind N.W. Force 1*

Force of surface current, *Drift N.W. 1/2 S 2 1/2 m*

Direction of bottom current, *Temperature at 20 f 52°*

Force of bottom current, *" 50 f 53°*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

944

Date,

Aug. 9th

Locality,

Lat. 40° 01' N.

Bearings,

Long 71° 14' 30" W.

Time of day, 8.27 A.M.; of tide,

State of sky,

Clear

Temperature of air,

78°

" surface of water,

70°

" at depth of 5 fathoms,

68. 10 f. 68.

" of bottom,

57°

Depth, in fathoms,

124 = 128

Nature of bottom,

Sand, mud & shells

Direction of surface current,

Wind S.W. Force 1.

Force of surface current,

Drift N.W. & N. 1 1/2 m.

Temperature at

Direction of bottom current,

20 f. 50°

Force of bottom current,

Name of vessel.

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

945

Date,

Aug. 9th

Locality,

Lat. $39^{\circ} 58' N$

Bearings,

Long. $71^{\circ} 13' W$

Time of day,

12.05 ; of tide,

State of sky,

Clear.

Temperature of air,

75°

"

surface of water,

71°

"

at depth of 5 fathoms,

$70^{\circ} 10'$ 67°

"

of bottom,

44°

Depth, in fathoms,

$202 = 207$.

Nature of bottom,

gy. mud & sand.

Direction of surface current,

Wind S.W. Force 4

Force of surface current,

Drift N.W. 1/2 S. 2 m

Direction of bottom current.

Temperature at 20 f. 58°
 54° 53°

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *946*

Date, *Aug. 9th*

Locality, *Lat. 39° 55' 30"*

Bearings, *Long. 71°, 14'*

Time of day, *2 P.M.* ; of tide,

State of sky, *Clear*

Temperature of air, *75°, 5'*

" surface of water, *71°*

" at depth of *5* fathoms, *61°, 10 f. 6*

" of bottom, *47°*

Depth, in fathoms, *241 = 247*

Nature of bottom, *gy. mud and sand*

Direction of surface current, *Wind S.W. Force 4*

Force of surface current, *Drift N.W. 1/2 M.*

Direction of bottom current, *Temperature at 20 f. 51°*

" " *5 f. 52°*

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *947*

Date, *Aug. 9th*

Locality, *Lat. 39° 53' 30"*

Bearings, *Long. 71° 13' 30"*

Time of day, *4 P.M.*; of tide,

State of sky, *Clear*

Temperature of air, *75°*

" surface of water, *70°*

" at depth of *5* fathoms, *60°*, *10 f. 55°*

" of bottom, *44°*

Depth, in fathoms, *3 1/2 = 319.*

Nature of bottom, *Sand and Mud.*

Direction of surface current, *Wind S.W. Force 4*

Force of surface current, *Drift N. 3/4 E. 3 mi.*

Direction of bottom current, *Temperature at 20 f. 50°*

Force of bottom current, " *50 f. 50°*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *948*

Date, *Aug. 13th*

Locality, *Buzzards Bay*

Bearings, *Bonaventure Island E 2 M.*

Time of day, *5.20 P.M.*; of tide,

State of sky, *B. Clear*

Temperature of air, *76*

" surface of water, *67*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *7*

Nature of bottom, *fine sh. mud & shells*

Direction of surface current, *S. W. Force 4*

Force of surface current, *Drift*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Lake Dredge

Current number of observation,

949.

Date,

Aug, 23, 1881.

Locality,

Off Martha Vineyard

Bearings,

Lat. $40^{\circ} 03'$ N.

Long. $70^{\circ} 31'$ W.

Time of day,

4, 20^{am}; of tide,

State of sky,

Clear

Temperature of air,

68

"

surface of water,

66

"

at depth of

5

fathoms,

66.

"

of bottom,

52.

Depth, in fathoms,

100.

Nature of bottom,

yellow mud.

Direction of ~~surface current~~,

Wind W, force, 3.

~~Force of surface current.~~

Drift N. N. W, 2 mi.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

Serial temperatures taken

949-

REMARKS.

At about 4 am, about
containing Capt. Chester
and others was left
with line haul to fish
for Lopholatilus. While
the rake dredge was
down, and before
the sun rose several
hundreds were taken
on the surface, exhib-
iting a much richer
fauna than is generally
found in the daytime

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *950,*
 Date, *Aug. 23, 1884.*
 Locality, *off Martha's Vineyard.*
 Bearings, *Lat. 40° 07' N.*
Long. 70° 32' W.
 Time of day, *5.50 am.*; of tide,
 State of sky, *Clear*
 Temperature of air, *69°*
 " surface of water, *65°*
 " at depth of fathoms,
 " of bottom, *52°*
 Depth, in fathoms, *69.*
 Nature of bottom, *Sand, shells, mud,*
brind.
 Direction of ~~surface~~ current, *W. force 4.*
~~Force of surface~~ current, *N. N. W. 1 1/2 m.*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

950,

REMARKS.

Monaster americanus, 3 ^{specimens} ~~specimens~~

TEMPERATURE RECORD.

Instrument used,

Trawl with wings.

Current number of observation,

957.

Date,

Aug. 23, 1881.

Locality,

Lat $39^{\circ} 57' N$

Bearings,

Long $70^{\circ} 31' 30'' W$.

Time of day, 9.40 am; of tide,

State of sky,

Clear.

Temperature of air,

78°

"

surface of water,

$67\frac{1}{2}^{\circ}$

"

at depth of

5

fathoms,

65°

"

of bottom,

41°

Depth, in fathoms,

219.

Nature of bottom,

mud.

Direction of ~~surface current~~ ^{refined} ~~surface current~~,

$W. N. W.$ force 3.

Force of ~~surface current~~ ^{Drift} ~~surface current~~,

$N. 1\frac{1}{2} m$,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

First time chotwings were used on trawl. brought up clean load, large Salpa, Shrimp, *Phyronoma*? large Copepod and small, all saved but some Salpae thrown away.

From trawl probe.
Paralichthys very abdt.
Holothura *medusa* "
Utricularia nodosa? (large sp.) "
Phlebotomus *lanceolatus*.

The wings, invented by Capt. Chesley, are a decided success and took many fine specimens, some of which also occasionally got up in trawl are generally crushed and torn, and in addition many small crustacea never taken in trawl.

TEMPERATURE RECORD.

Instrument used, *Trawl, Fath. wing.*

Current number of observation, *952,*

Date, *Aug 20, 1881.*

Locality, *Off Martha's vineyard.*

Bearings, *Lat 39° 55' N,*

Long. 70° 28' W,

Time of day, *11.28 a.m.* of tide,

State of sky, *Clear.*

Temperature of air, *87.2,*

" surface of water, *68,*

" at depth of *5* fathoms, *66,*

" of bottom, *40,*

Depth, in fathoms, *388,*

Nature of bottom, *Yellow mud and sand*

Direction of ~~surface current~~ *wind*, *N. N. W. force 2,*

Drift Force of surface current, *N. E. by N. 1 1/2 m.*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

952-

REMARKS.

In rings, many *Cantharus*,
 175 or 3 small fish. ^{*alloporus*} ^{*mailli*}
 many Caprellids, No *Alpheidae*

Sand

deep sea worm tubes, about
 1/2 bushel thrown away
 30 *Urticina* *madona*, ^{thrown away}
Acrotella *Normana* all sand

TEMPERATURE RECORD.

Instrument used,

Trawl with wings

Current number of observation,

953

Date,

Aug, 23, 1881.

Locality,

off Cape Cod

Bearings,

Lat. $39^{\circ} 52' 30''$ N

Long. $70^{\circ} 17' 30''$ W

Time of day,

2,30 P.M.; of tide,

State of sky,

Clear.

Temperature of air,

72.

"

surface of water,

68.

"

at depth of

5

fathoms,

64.

"

of bottom,

$39\frac{1}{2}$

Depth, in fathoms,

715.

Nature of bottom,

mud.

Direction of

wind

W. N. W. Force 2.

Force of surface current.

Drift

N. N. W. $1\frac{1}{2}$ m.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

953 -
REMARKS.

A water haul but
contained some things
that might have
come from the bottom.
A squid, with hooks on
most arms, including
a very long one ^{near} ~~on~~ end
of long arms. Several
species of gilly fishes
and crustacea.
The wings contained
small crustacea.

TEMPERATURE RECORD.

Instrument used, *Trawl with wings.*

Current number of observation, *954*

Date, *Aug. 23, 1881.*

Locality, *off Martha's Vineyard*

Bearings, Lat. *39° 53' N.*

Long. *70° 18' 30" W.*

Time of day, *4.50 P.M.*; of tide,

State of sky, *Clear*

Temperature of air, *74.5*

" surface of water, *68*

" at depth of *5* fathoms, *65.*

" of bottom, *39 1/2*

Depth, in fathoms, *642.*

Nature of bottom, *Sand and mud.*

Direction of ~~surface current~~ *Wind*, *W. by N. force 2*

~~Force of surface current~~ *Drift*, *N. N. W. 2 m.*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

A water haul like
the last, a few shrimps,
and jelly-fish.

In one of the haul
wings there was nothing.
In the other a few
Crustacea, Sagitta,
including the large
Copepods, which have
been obtained in all
of the haul hauls of
this day, and in addition
another new species
of tremendous size measuring
just $\frac{1}{2}$ inch long, represented
by two species.

TEMPERATURE RECORD.

Instrument used,

Trawl with loggers.
~~None used~~

Current number of observation,

955.

Date,

Aug. 26, 1884.

Locality,

Buzzards Bay,

Bearings,

Near Neck

E. by S. 1/4 mile

Time of day, 10.50 a.m., of tide,

State of sky,

Clear

Temperature of air,

~~67~~⁶⁹

" surface of water,

~~67.5~~ 67.5

" at depth of

fathoms,

" of bottom,

~~62~~ 68"

Depth, in fathoms,

7.

Nature of bottom,

Sand

Direction of ~~surface~~ current,

wind S.W. force 3.

Force of surface current,

Drift W. by S 1/4 S. 1/2 m.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

Observ. made in open air
from ship. Temperature and
wind of lowering & hauling

955.

REMARKS.

Large amt. of dead
eelgrass and many
Cliona onephura

TEMPERATURE RECORD.

Instrument used, *956 Frawlinth Long*

Current number of observation, *956*

Date, *Aug. 26, 1881*

Locality, *Buzzards Bay*

Bearings, *Nyack Neck, S. S. E. $\frac{3}{4}$ E. $\frac{1}{8}$ m.*

Time of day, *11.26 a.m.*; of tide, *ebb.*

State of sky, *Clear*

Temperature of air, *71*

" surface of water, *69*

" at depth of fathoms,

" of bottom, *68*

Depth, in fathoms, *5 $\frac{1}{4}$*

Nature of bottom, *Sandy*

Direction of ~~surface current~~ *wind S.W. force 3.*

Force of surface current, *Drift W. by S. $\frac{1}{4}$ m*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

956-

REMARKS.

Same character of bottom
as last, dead eel grass.
Many specimens of
Ulva fraxata, *Cliona*
melobesia

TEMPERATURE RECORD.

Instrument used, *Trawl with wings.*

Current number of observation, *957*

Date, *Aug. 26. 1881.*

Locality, *Buzzard's Bay.*

Bearings, *Nyer Neck S. S. E. $\frac{3}{4}$ E, $\frac{1}{8}$ m.*

Time of day, *11.45* ; of tide, *ebb.*

State of sky, *Clear*

Temperature of air, *73.*

" surface of water, *69.5*

" at depth of fathoms,

" of bottom, *68,*

Depth, in fathoms, *6,*

Nature of bottom, *Sand & stones.*

Direction of ~~surface current~~ *wind* *S. W. force 4,*

~~Force of surface current.~~ *Drift* *N. $\frac{3}{4}$ N. $\frac{1}{4}$ m*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

957

REMARKS.

Fellha & *Cliona*
abundant.

TEMPERATURE RECORD.

Instrument used, *Trawl with wings.*

Current number of observation, *958.*

Date, *Aug. 26, 1881.*

Locality, *Buzzards Bay.*

Bearings, *Nyes Neck S. by E.
1/4 E. 1/3 m*

Time of day, *12.20* ; of tide, *ebb.*

State of sky, *Clear.*

Temperature of air, *75.*

" surface of water, *70.*

" at depth of fathoms,

" of bottom, *68.*

Depth, in fathoms, *5.*

Nature of bottom, *Sand, shales & shells.*

Direction of ~~surface current~~, *wind S.W. force 5.*

~~Force of surface current.~~ *drift N.S.W. 1/3 m*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

958,
REMARKS.

Leahy & Clona,

TEMPERATURE RECORD.

Instrument used, *Trawl with wings.*

Current number of observation, *959.*

Date, *Aug. 26, 1881.*

Locality, *Buzzards Bay,*

Bearings, *Nyes Neck S.
1/2 m.*

Time of day, *12.40 p.m.* of tide, *ebb.*

State of sky, *Clear.*

Temperature of air, *72.*

" surface of water, *69.*

" at depth of fathoms,

" of bottom, *68.*

Depth, in fathoms, *5.*

Nature of bottom, *sand, stones, shells,*

Direction of surface current, *and S. W. force 5,*

Force of surface current, *drift W. 1/2 mile*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

959.

REMARKS.

No Tachya ?

TEMPERATURE RECORD.

Instrument used,

Trawl nettings,

Current number of observation,

960,

Date,

Aug. 26, 1881.

Locality,

Buzzard's Bay,

Bearings,

Nye's Neck S. $3\frac{1}{4}$ E.
 $\frac{1}{2}$ m.

Time of day,

1.10 P.M. of tide,

State of sky,

Clear,

Temperature of air,

72.5

"

surface of water,

69.5

"

at depth of

fathoms,

"

of bottom,

68,

Depth, in fathoms,

4 $\frac{1}{2}$

Nature of bottom,

Sand, stones, shells,

Direction of surface current,

Wind S.W. force 5,

Force of surface current,

Drift S.W. by W. $\frac{1}{2}$ m.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.